HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

Bonneville Project, Powerhouse No. 1 Golumbia River Bonneville Multnomah County Oregon HAER No. OR-11-E

Bob Heims, Photographer September 1987

- OR-11-E-1 GENERAL EXTERIOR VIEW LOOKING SOUTHEAST, SHOWING DOWNSTREAM FAGADE OF POWERHOUSE #1; FLOWERS IN FOREGROUND ARE ON WESTERN END OF BRADFORD ISLAND.
- OR-11-E-2 GENERAL EXTERIOR VIEW LOOKING NORTHEAST, SHOWING DOWNSTREAM FAGADE OF POWERHOUSE #1; WATER IN OUTLET CHANNEL IS VISIBLE IN LEFT FOREGROUND.
- OR-11-E-3 GENERAL EXTERIOR VIEW LOOKING SOUTHEAST, SHOWING DOWNSTREAM FAGADE OF POWERHOUSE #1.
- OR-11-E-4 GENERAL EXTERIOR VIEW LOOKING NORTHWEST, SHOWING BRADFORD SLOUGH WITH BRADFORD ISLAND IN RIGHT BAGKGROUND AND UPSTREAM FACE OF POWERHOUSE #1 IN CENTER BACKGROUND.
- OR-11-E-5 GENERAL EXTERIOR VIEW LOOKING NORTHWEST, SHOWING UPSTREAM FACADE OF POWERHOUSE #1; BRADFORD SLOUGH IS IN FOREGROUND; NAVIGATION LOCK #1 IS ON FAR LEFT.
- OR-11-E-6 GENERAL EXTERIOR VIEW OF POWERHOUSE #1 LOOKING NORTH, SHOWING UPSTREAM FAGADE; WATER IN BRADFORD SLOUCH IS IN FOREGROUND.
- OR-11-E-7 GENERAL VIEW LOOKING NORTH, SHOWING UPSTREAM SIDE OF POWERHOUSE #1; ADMINISTRATIVE OFFIGES ARE VISIBLE AT CENTER/LEFT WITH ELEVATOR TOWER IN LEFT BAGKGROUND; GANTRY CRANE IS VISIBLE IN FAR RICHT BACKGROUND.
- OR-11-E-8 GENERAL EXTERIOR VIEW LOOKING EAST, SHOWING THE DOWNSTREAM FACE
 OF THE SOUTH END OF POWERHOUSE #1; SWITCHING EQUIPMENT IS ON TOP,
 MAIN SEGTION OF POWERHOUSE #1 IS IN CENTER, AND OUTLET PIERS ARE
 ON BOTTOM; WATER IN OUTLET CHANNEL IS IN FOREGROUND.
- OR-11-E-9 GENERAL EXTERIOR VIEW LOOKING NORTHEAST, SHOWING DOWNSTREAM END OF NAVIGATION LOCK #1 WITH MITER GATES CLOSED; POWERHOUSE #1 IS VISIBLE IN CENTER BACKGROUND; PHOTO IS TAKEN FROM SWING BRIDGE BELOW LOCK.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 2) Index to Photographs

- OR-11-E-10 DETAIL EXTERIOR VIEW OF SWITCHING EQUIPMENT AND METAL FRAME SUPPORT STRUCTURE ON ROOF OF POWERHOUSE #1.
- OR-11-E-11 CENERAL EXTERIOR VIEW LOOKING NORTHEAST DOWN THE LENGTH OF POWERHOUSE #1 ON THE ROOF; VIEW SHOWS SWITCHING EQUIPMENT.
- OR-11-E-12 DETAIL VIEW OF 115 KILOVOLT, 600 AMP SWITCHING EQUIPMENT ON ROOF OF POWERHOUSE #1.
- OR-11-E-13 DETAIL VIEW LOOKING NORTH, SHOWING REINFORCED CONCRETE CRENELATED CORNICE LINE ON SOUTH FACADE OF POWERHOUSE #1.
- OR-11-E-14 DETAIL EXTERIOR VIEW LOOKING WEST, SHOWING TRANSFORMER UNITS ON THE UPSTREAM SIDE OF POWERHOUSE #1; THE THREE TRANSFORMERS SHOWN WORK IN CONCERT WITH ONE ANOTHER TO RAISE THE VOLTAGE OF THREE-PHASE ALTERNATING CURRENT PRODUCED BY THE GENERATORS.
- OR-11-E-15 CENERAL EXTERIOR VIEW LOOKING SOUTH, SHOWING THE UPSTREAM FACADE OF POWERHOUSE #1; TRANSFORMERS ARE VISIBLE ON THE RICHT, THE CANTRY CRANE IS LEFT/CENTER, AND SWITCHING EQUIPMENT IS ON TOP OF BUILDING.
- OR-11-E-16 DETAIL EXTERIOR VIEW LOOKING NORTHEAST, SHOWING INTAKE PIER ON UPSTREAM SIDE OF POWERHOUSE #1.
- OR-11-E-17 DETAIL INTERIOR VIEW OF CONTROL ROOM ON LEVEL +77 OF
 POWERHOUSE #1; NOTEBOOKS IN FOREGROUND ARE ON TOP OF THE NEW
 SWITCH GEAR CONTROL CONSOLE; THE ORICINAL OPERATOR DESK IS IN
 CENTER; THE ORIGINAL BENCH BOARD CONTROLS ARE IN BACKGROUND.
- OR-11-E-18 DETAIL INTERIOR VIEW OF CONTROL ROOM ON LEVEL +77 OF
 POWERHOUSE #1; ORIGINAL OPERATOR DESK IS IN CENTER FOREGROUND;
 NEW SWITCH GEAR CONTROL CONSOLE IS IN RIGHT BACKGROUND; GRAPHIC
 INSTRUMENT BOARD IS IN LEFT BACKGROUND.
- OR-11-E-19 DETAIL INTERIOR VIEW OF STATION SERVICE CONTROLS IN CONTROL ROOM
 ON LEVEL +77 OF POWERHOUSE #1; THE ORIGINAL OPERATOR DESK IS
 PARTIALLY VISIBLE IN LEFT FOREGROUND.
- OR-11-E-20 DETAIL INTERIOR VIEW OF STATION SERVICE CONTROLS IN CONTROL ROOM ON LEVEL +77 OF POWERHOUSE #1; THESE CONTROLS ARE TO THE LEFT OF THE ORIGINAL OPERATOR DESK.
- OR-11-E-21 DETAIL INTERIOR VIEW OF ORIGINAL BENCH BOARD CONTROLS IN CONTROL ROOM ON LEVEL +77 OF POWERHOUSE #1; THESE PANELS ARE ON LEFT SIDE OF BENCH BOARD CONTROLS.
- OR-11-E-22 GENERAL INTERIOR VIEW LOOKING DOWN THE LENGTH OF BUS CELL CALLERY ON LEVEL +77 OF POWERHOUSE #1.
- OR-11-E-23 GENERAL INTERIOR VIEW LOOKING DOWN THE LENGTH OF THE OIL AND WATER PIPE GALLERY ON LEVEL +77 OF POWERHOUSE #1,

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 3) Index to Photographs

- OR-11-E-24 DETAIL INTERIOR VIEW OF GENERATOR BUS POTENTIAL FOR UNIT NO.1 IN BUS CELL GALLERY ON LEVEL +77 OF POWERHOUSE #1.
- OR-11-E-25 DETAIL INTERIOR VIEW OF THE OIL AND WATER PIPE GALLERY ON LEVEL +77 OF POWERHOUSE #1.
- OR-11-E-26 DETAIL INTERIOR VIEW OF OIL AND WATER PIPE GALLERY ON LEVEL +77 OF POWERHOUSE #1.
- OR-11-E-27 GENERAL INTERIOR VIEW LOOKING DOWN THE LENGTH OF OIL CIRCUIT BREAKER GALLERY ON LEVEL +65 OF POWERHOUSE #1.
- OR-11-E-28 GENERAL DETAIL VIEW OF EQUIPMENT ON DOWNSTREAM SIDE OF OIL CIRCUIT BREAKER GALLERY ON LEVEL +65 OF POWERHOUSE #1.
- OR-11-E-29 DETAIL INTERIOR VIEW OF EQUIPMENT IN SOUTH BANK FEEDER
 CABLE NO. 1 ON UPSTREAM SIDE OF OIL CIRCUIT BREAKER GALLERY ON
 LEVEL +65 OF POWERHOUSE #1.
- OR-11-E-30 GENERAL INTERIOR VIEW OF TURBINE/GENERATORS ON MAIN FLOOR (LEVEL +55) OF POWERHOUSE #1; VIEW IS TAKEN FROM LEVEL +82 AT SOUTH END OF POWERHOUSE.
- OR-11-E-31 DETAIL INTERIOR VIEW OF TURBINE/GENERATOR UNIT NO. 2 IN MAIN ROOM (LEVEL +55) OF POWERHOUSE #1.
- OR-11-E-32 DETAIL INTERIOR VIEW OF LEVEL +55 IN POWERHOUSE #1, SHOWING GOVERNOR CONTROL CABINET BETWEEN TURBINE/GENERATOR UNIT NO. 1 (ON FAR LEFT) AND NO. 2 (OUT OF VIEW ON RIGHT).
- OR-11-E-33 DETAIL INTERIOR VIEW OF LEVEL +55 IN POWERHOUSE #1, SHOWING TURBINE/GENERATOR CONTROL PANEL FOR TURBINE/GENERATOR UNIT NO. 1.
- OR-11-E-34 DETAIL INTERIOR VIEW OF MACHINE SHOP ON LEVEL +55 OF POWERHOUSE #1; CARLTON MACHINE TOOL CO. DRILL IS IN LEFT FOREGROUND; SUDBURY MACHINE TOOL CO. LATHES ARE IN BACKGROUND.
- OR-11-E-35 DETAIL INTERIOR VIEW OF TILE DECORATION ON WALL OF POWERHOUSE #1
 ON LEVEL +55; THE WINDOWS LOOK OUT ON DISCHARGE CHANNEL
 DOWNSTREAM FROM POWERHOUSE.
- OR-11-E-36 DETAIL INTERIOR VIEW OF NAMEPLATES ON TURBINE/GENERATOR UNIT NO. 2 IN POWERHOUSE #1 ON LEVEL +55.
- OR-11-E-37 GENERAL INTERIOR VIEW OF GALLERY RUNNING THE LENGTH OF POWERHOUSE #1 AT LEVEL +43.5; SWITCHBOARD EQUIPMENT IS ON RIGHT.
- OR-11-E-38 DETAIL INTERIOR VIEW OF LEVEL +43.5 IN POWERHOUSE #1, SHOWING TRANSFORMER BANKS NO. 11 AND NO. 12.
- OR-11-E-39 DETAIL INTERIOR VIEW OF LEVEL +43.5 IN POWERHOUSE #1, SHOWING 2,400 VOLT BREAKER CABINETS.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 4) Index to Photographs

- OR-11-E-40 DETAIL INTERIOR VIEW OF LEVEL +43.5 IN POWERHOUSE #1, SHOWING LIGHTING VAULT.
- OR-11-E-41 GENERAL INTERIOR VIEW TAKEN FROM LEVEL +37 OF POWERHOUSE #1, SHOWING OPENING IN FLOOR OF LEVEL +55.
- OR-11-E-42 CENERAL INTERIOR VIEW OF STATION SERVIGE TURBINE/GENERATOR UNIT ON LEVEL +37 OF POWERHOUSE #1.
- OR-11-E-43 GENERAL INTERIOR VIEW OF TURBINE/GENERATOR UNIT NO. 1 ON LEVEL +37 OF POWERHOUSE #1; COOLER PUMP IS VISIBLE IN GENTER/RIGHT.
- OR-11-E-44 DETAIL INTERIOR VIEW OF TURBINE SHAFT TAKEN FROM OPENING ON LEVEL +37 OF POWERHOUSE #1.
- OR-11-E-45 DETAIL INTERIOR VIEW OF WICKET GATE GONTROL MECHANISM FOR TURBINE/CENERATOR UNIT ACGESSIBLE FROM LEVEL +37 OF POWERHOUSE #1.
- OR-11-E-46 DETAIL INTERIOR VIEW OF COOLER PUMP SERVING TURBINE/GENERATOR UNIT NO. 1 ON LEVEL +37 OF POWERHOUSE #1.
- OR-11-E-47 DETAIL INTERIOR VIEW OF CARBON DIOXIDE TANKS ON LEVEL +37 OF POWERHOUSE #1.
- OR-11-E-48 DETAIL INTERIOR VIEW OF ACTUATOR TANKS BETWEEN TURBINE/GENERATOR UNITS NO. 1 AND NO. 2 ON LEVEL +37 OF POWERHOUSE #1.
- OR-11-E-49 DETAIL INTERIOR VIEW OF STATION SERVICE UNIT TRANSFORMERS ON LEVEL +37 IN POWERHOUSE #1.
- OR-11-E-50 DETAIL INTERIOR VIEW OF LEVEL +23 OF POWERHOUSE #1, SHOWING STATION SERVICE TURBINE PIT.
- OR-11-E-51 CENERAL INTERIOR VIEW OF LEVEL -10 IN POWERHOUSE #1; COOLING WATER PUMPS ARE ON RIGHT AND THE FIRE PROTECTION PUMP IS IN THE CENTER/LEFT BACKCROUND.
- OR-11-E-52 GENERAL INTERIOR VIEW LOOKING DOWN LENGTH OF POWERHOUSE #1 AT LEVEL -23; PASSAGEWAY IS KNOWN AS DRAFT TUBE GALLERY.
- OR-11-E-53 DETAIL INTERIOR VIEW AT LEVEL -23 OF POWERHOUSE #I, SHOWING SGROLL CASE AGCESS HATCH FOR CENERATOR/TURBINE UNIT NO. 3.
- OR-11-E-54 DETAIL INTERIOR VIEW AT LEVEL -23 OF POWERHOUSE #I, SHOWING SGROLL GASE DRAIN VALVE FOR CENERATOR/TURBINE UNIT NO. 3.
- OR-11-E-55 DETAIL INTERIOR VIEW OF LEVEL -42 IN POWERHOUSE #1, SHOWING AIR GOMPRESSORS.
- OR-11-E-56 DETAIL INTERIOR VIEW OF LEVEL -58 IN POWERHOUSE #1, SHOWING UNWATERING PUMPS.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 5) Index to Photographs

OR-11-E-57 DETAIL INTERIOR VIEW OF LEVEL -63 IN POWERHOUSE #1, SHOWING UNWATERING SUMPS AT SOUTH END OF BUILDING.

Photograph Nos. OR-11-E-58 through OR-11-E-102 are photocopies of photographs. Original historic photographs are located at the Bonneville Powerhouse, Bonneville, Oregon.

- OR-11-E-58 photographer unknown undated
 TWO POTHOLES LOCATED AT POWERHOUSE SITE, TO BE FILLED WITH
 CONCRETE.
- OR-11-E-59 photographer unknown undated FACE OF ROCK LEDGE, SHOWING EXCAVATION FOR CENTER LINE OF POWERHOUSE UNITS.
- OR-11-E-60 photographer unknown undated CONCRETE BEING POURED ON CENTER PORTION OF DRAFT TUBE FLOOR SLAB.
- OR-11-E-61 photographer unknown undated FIRST CONCRETE BEING POURED IN DRAFT TUBE FLOOR SLAB.
- OR-11-E-62 photographer unknown undated ERECTING FORMS, PLACING REINFORCING STEEL, AND CONCRETING DRAFT PIER OF POWERHOUSE.
- OR-11-E-63 photographer unknown undated ERECTING STEEL AND FORMS IN PREPARATION FOR POURING CONCRETE.
- OR-11-E-64 photographer unknown undated UPSTREAM SIDE OF POWERHOUSE SUBSTRUCTURE.
- OR-11-E-65 photographer unknown 26 March 1935 POURING CONCRETE IN POWERHOUSE SUBSTRUCTURE.
- OR-11-E-66 photographer unknown 5 April 1935
 HEAVY STEEL REINFORCEMENT IN ICE SLUICEWAY.
- OR-11-E-67,68 photographer unknown 11 May 1935
 UPSTREAM SIDE OF POWERHOUSE STRUCTURE SHOWING INTAKE PIERS.
- OR-11-E-69 photographer unknown 21 May 1935
 TURBINE PITS AND DOWNSTREAM PIERS, POWERHOUSE SUBSTRUCTURE.
- OR-11-E-70 photographer unknown 8 August 1935 POWERHOUSE SUBSTRUCTURE SHOWING TURBINE PITS.
- OR-11-E-71 photographer unknown 9 September 1935
 DOWNSTREAM SIDE OF POWERHOUSE SUBSTRUCTURE, SHOWING FISHWAY AND DRAFT TUBE OUTLETS.
- OR-11-E-72 photographer unknown 22 November 1935
 PLACING CONCRETE FORM FOR STATION SERVICE DRAFT TUBES.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 6) Index to Photographs

- OR-11-E-73 photographer unknown 9 January 1936
 TOP OF DRAFT TUBE LINER AND SPEED RING PIERS.
- OR-11-E-74 photographer unknown 19 January 1936 INTAKE TUBE TO TURBINE PIT.
- OR-11-E-75 photographer unknown 13 March I936
 LOCK CHAMBER AND POWERHOUSE SUBSTRUCTURE NEARLY COMPLETE. WORK
 ENCLOSED BY COFFERDAMS.
- OR-11-E-76 photographer unknown 31 March 1936
 INTAKE PIERS AND SCROLL CASE TO UNIT NO. 1.
- OR-11-E-77 photographer unknown 17 April 1937
 ASSEMBLING BEARING SUPPORT AND GENERATOR ROTOR FOR UNIT NO. 1.
- OR-11-E-78 photographer unknown 23 April 1937 ASSEMBLING GENERATOR FOR UNIT NO. 1.
- OR-11-E-79 photographer unknown 5 May 1937 ASSEMBLING GENERATING ROTOR FOR UNIT NO. 1.
- OR-11-E-80 photographer unknown 7 June 1937
 PLACING MAIN THRUST BEARING ASSEMBLY IN UNIT NO. 2.
- OR-11-E-81 photographer unknown 11 June 1937
 WORKMEN ON TURBINE BLADES BEFORE LOWERING INTO DRAFT TUBE LINER.
- OR-11-E-82 photographer unknown 12 June 1937
 ASSEMBLING TURBINE AND ROTOR FOR UNITS NOS. 1 AND 2.
- OR-I1-E-83 photographer unknown 16 June 1937 ASSEMBLING STATOR FOR UNIT NO. 2.
- OR-11-E-84 photographer unknown 19 June 1937 CLOSE UP, VIEW OF ROTOR FOR UNIT NO. 2.
- OR-11-E-85 photographer unknown 26 June 1937
 CENERAL VIEW 55 DECK, ASSEMBLING GENERATOR ROTOR AND STATOR FOR UNIT NO. 2.
- OR-11-E-86 photographer unknown 31 July 1937 CLOSE UP, ASSEMBLING ROTOR FOR UNIT NO. 2.
- OR-11-E-87 photographer unknown 1 September 1937 CLOSE UP, ROTOR AND STATOR IN UNIT NO. 2.
- OR-11-E-88 photographer unknown 4 September 1937 GENERAL VIEW OF UNIT NO. 1.
- OR-11-E-89 photographer unknown 10 September 1937 GENERAL VIEW OF UNIT NO. 2.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 7) Index to Photographs

- OR-11-E-90 photographer unknown 10 September 1937
 GENERAL VIEW ASSEMBLING ROTOR FOR UNIT NO. 1.
- OR-11-E-91 photographer unknown 18 September 1937 55 DECK, GENERAL VIEW OF UNIT NO. 1 AND ROTOR.
- OR-11-E-92 photographer unknown 16 October 1937
 GENERAL VIEW 55 DEGK, ASSEMBLING GENERATORS FOR UNITS NOS. 1
 AND 2.
- OR-11-E-93 photographer unknown 20 October 1937 LIFTING ROTOR FOR UNIT NO. 1.
- OR-11-E-94 photographer unknown 20 October 1937 CLOSE UP, PLAGING ROTOR FOR UNIT NO. 1.
- OR-11-E-95 photographer unknown 5 November 1937 GENERAL VIEW OF UNIT NO. 1 AND EXCITER SHAFT IN PLACE.
- OR-11-E-96 photographer unknown 27 November 1937 GENERAL VIEW 55 DECK, ASSEMBLING UNITS NOS. 1 AND 2.
- OR-11-E-97 photographer unknown 7 March 1938 BOTTOM OF ROTOR AND BREAK SYSTEM.
- OR-11-E-98 photographer unknown 24 May 1938
 DOWNSTREAM SIDE OF POWERHOUSE WITH SUPERSTRUCTURE FOR ORIGINAL
 TWO UNITS.
- OR-1-E-99 photographer unknown 17 July 1939 COMPLETED GENERATORS NOS. 1 AND 2.
- OR-11-E-100 photographer unknown 29 March 1940
 PREPARATIONS FOR POURING CONCRETE AROUND PIT LINER OF UNIT NO. 3.
- OR-11-E-101 photographer unknown 18 July 1942

 EREGTING SUPERSTRUCTURE FOR POWERHOUSE EXTENSION, SHOWING UNITS
 NOS. 9 AND 10.
- OR-11-E-102 photographer unknown 14 December 1943
 VIEW OF GENERATOR ROOM, SHOWING ALL TEN UNITS IN OPERATION.
- OR-11-E-103 Photocopy of original construction drawing, dated 12 December 1933. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland District, Portland, OR.) (T-1-2)

 UNITED STATES BUREAU OF FISHERIES. PROPOSED MULTIPLE COLLECTING FISHWAYS AND HYDRAULIC FISH LIFT AT THE BONNEVILLE POWERHOUSE.
- OR-11-E-104 Photocopy of original construction drawing, dated 24 October 1934. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-5-307) POWERHOUSE, HORIZONTAL SEGTIONS OF STATION SERVICE UNIT.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 8) Index to Photographs

- OR-11-E-105 Photocopy of original construction drawing, dated 23 November 1934. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-5-310, Sheet 1 of 2)
 SCROLL CASE DESIGN.
- OR-11-E-106 Photocopy of original construction drawing, dated 7 December 1934. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-5-311) POWERHOUSE, 60,000 H.P. DRAFT TUBE DESIGN.
- OR-11-E-107 Photocopy of original construction drawing, dated 15 December 1934. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-5-309) PLAN AND ELEVATION OF UNITS, SHOWING TENTATIVE LOCATION OF AUXILIARIES.
- OR-11-E-108 Photocopy of original construction drawing, dated 15 December 1934. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-5-310, Sheet 2 of 2)
 SCROLL CASE DESIGN.
- OR-11-E-109 Photocopy of original construction drawing, dated 10 January 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (T-3-7) POWERHOUSE FISHWAY, CENERAL ARRANGEMENT DIFFUSING CHAMBER UNDER ICE SLUICE.
- OR-11-E-110 Photocopy of original construction drawing, dated 14 January 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (T-3-5) POWERHOUSE SUBSTRUCTURE, FISHWAY WEIR WATER SUPPLY GATE.
- OR-11-E-111 Photocopy of original construction drawing, dated 31 January 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (T-1-28)
 PROPOSED MODEL OF DIFFUSING CHAMBERS AND CRATINGS FOR POWERHOUSE FISHWAY AND FISH LADDERS.
- OR-11-E-112 Photocopy of original construction drawing, dated 24 April 1935.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-60)

 CIRCUIT BREAKER GALLERY AND CABLE TERMINAL BOARD ROOM.
- OR-11-E-113 Photocopy of original construction drawing, dated 25 April 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-57) GENERATOR FLOOR, EL. +55.
- OR-11-E-114 Photocopy of original construction drawing, dated 25 April 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-61) BUS AND PIPE GALLERIES, AND CONTROL ROOM, EL. +77.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 9) Index to Photographs

- OR-11-E-115 Photocopy of original construction drawing, dated 25 April 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-62) INTAKE DECK, EL. +90.
- OR-11-E-116 Photocopy of original construction drawing, dated 2 May 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-51) ELEVATIONS.
- OR-11-E-117 Photocopy of original construction drawing, dated 13 May 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-56) TURBINE FLOOR, EL. +37.
- OR-11-E-118 Photocopy of original construction drawing, dated 21 May 1935.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-59)

 UPPER PIPE GALLERY OIL STORACE AND SEWACE DISPOSAL, EL. +23.5.
- OR-11-E-119 Photocopy of original construction drawing, dated 10 June 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-58) PLAN SECTION AT EL. +12.5.
- OR-11-E-120 Photocopy of original construction drawing, dated 13 June 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-55) PLAN SECTIONS AT EL. -10, -26, -42, -58.
- OR-11-E-121 Photocopy of original construction drawing, dated 26 August 1935.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-10-19)

 WINDOWS AND LOUVRES, LAYOUT AND DETAILS.
- OR-11-E-122 Photocopy of original construction drawing, dated 20 September 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-6-50) COMPLETE TRANSVERSE SECTION.
- OR-11-E-123 Photocopy of original construction drawing, dated 8 October 1935.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (T-3-78)

 LAYOUT, FINGERLING BY-PASS AND WATER CONDUIT.
- OR-11-E-124 Photocopy of original construction drawing, dated 12 October 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (T-3-83, Sheet 1 of 6)

 COLLECTION CHANNEL DETAILS: WOOD CRATING AND BAFFLES IN DIFFUSION CHAMBERS.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 10) Index to Photographs

- OR-11-E-125 Photocopy of original construction drawing, dated 15 October 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-5-261) INDOOR 300 TON CRANES, CENERAL FEATURES AND CLEARANCES.
- OR-11-E-126 Photocopy of original construction drawing, dated 27 November 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-12-14) TURBINE FLOOR, EL. +37.
- OR-11-E-127 Photocopy of original construction drawing, dated 2 December 1935. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-12-13) GENERATOR FLOOR, EL. +55.
- OR-11-E-128 Photocopy of original construction drawing, dated 24 February 1936. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-12-23) LONG'L SECTION ON L UNITS, EL. +37 TO +77.
- OR-11-E-129 Photocopy of original construction drawing, dated 3 March 1936. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-12-26) TRANSVERSE SECTION THRU CENERATOR AND TURBINE.
- OR-11-E-130 Photocopy of original construction drawing, dated 18 May 1937.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-11-35)

 TILE FLOOR AND WAINSCOT IN GENERATOR ROOM.
- OR-11-E-131 Photocopy of original construction drawing, dated 22 June 1937. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (T-7-32) ROTARY CRANE, POWERHOUSE FISH LIFTS.
- OR-11-E-132 Photocopy of original construction drawing, dated 19 March 1940. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-40-6) COMPLETE PLAN OF FOUNDATION STRUCTURE.
- OR-11-E-133 Photocopy of original construction drawing, dated 21 March 1940. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-40-8) TYPICAL PIER ELEVATION.
- OR-11-E-134 Photocopy of original construction drawing, dated 29 March 1940. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-40-9) LONGITUDINAL SECTION AT UNIT 10 AND ASSEMBLY BAY.
- OR-11-E-135 Photocopy of original construction drawing, dated 30 March 1940. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-40-7) PLAN OF FOUNDATION STRUCTURE AT ELEV. O.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 11) Index to Photographs

- OR-11-E-136 Photocopy of original construction drawing, dated 23 April 1940.

 (Original print in the possession of U.S. Army Gorps of
 Engineers, Portland District, Portland, OR.) (P-40-12)

 NORTHEAST RETAINING WALLS.
- OR-11-E-137 Photocopy of original construction drawing, dated 12 July 1940.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-40-10) FOUNDATION STRUCTURE UNIT 10.
- OR-11-E-138 Photocopy of original construction drawing, dated 2 October 1946.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-45-25)
 POWERHOUSE DOWNSTREAM ELEVATION.
- OR-11-E-139 Photocopy of original construction drawing, dated 2 October 1946.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-45-26) POWERHOUSE UPSTREAM ELEVATION.
- OR-11-E-140 Photocopy of original construction drawing, dated 2 October 1946. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-45-28) POWERHOUSE SUBSTRUCTURE SEGTIONS.
- OR-11-E-141 Photocopy of original construction drawing, dated 2 October 1940.

 (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-45-29)

 POWERHOUSE LONGITUDINAL SECTION.
- OR-11-E-142 Photocopy of original construction drawing, dated 2 October 1946.

 (Original print in the possession of U.S. Army Gorps of Engineers, Portland District, Portland, OR.) (P-45-30) POWERHOUSE SECTIONAL PLAN.
- OR-11-E-143 Photocopy of original construction drawing, undated. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-11-340, Sheet 1 of 3) POWERHOUSE, FLOOR PLANS, GENERAL PIPING ARRANCEMENT.
- OR-11-E-144 Photocopy of original construction drawing, undated. (Original print in the possession of U.S. Army Gorps of Engineers, Portland District, Portland, OR.) (P-11-340, Sheet 2 of 3) POWERHOUSE, FLOOR PLANS, GENERAL PIPING ARRANCEMENT.
- OR-11-E-145 Photocopy of original construction drawing, undated. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.) (P-11-340, Sheet 3 of 3) POWERHOUSE, FLOOR PLANS, GENERAL PIPING ARRANGEMENT.

Bonneville Project, Powerhouse No. 1 HAER No. OR-11-E (Page 12) Index to Photographs

OR-11-E-146 Photocopy of original construction drawing, undated. (Original print in the possession of U.S. Army Corps of Engineers, Portland District, Portland, OR.)

GENERAL ARRANGEMENT POWERHOUSE FISH LOCKS.

NOTE: For written historical and descriptive data, please see the Bonneville Project main entry, HAER No. OR-11.